

Construction and operation of seat back locking system

The automatic seat back locking system of the coupe serves the safety of the passengers, by the fact that the back resists high thrust loads — in case of an accident — and does not alter its position. The system operates with vacuum, which builds up in the intake manifold of the running engine.

The line system of the vacuum seat back locking system is directly connected to the intake manifold of the engine without a reservoir, and the system is only in service with engine running.

If both driver's doors are closed and none of the two rear switches are operated, the line system is also closed. With running engine, vacuum is built up, which actuates the working units arranged under the driver's seats. The force of the working elements acts via linkage and angular lever onto the locking hooks. At each side of the seat cushions, one of these hooks is arranged, and which holds the seat back fitting via a pin under preload.

This preload is required, to avoid rattling of the seat back or the locking mechanism in the locked state.

As soon as driver's door is opened or a rear switch is operated, the line system is under atmospheric pressure and the vacuum elements become ineffective. Return springs supply the necessary force to pull the locking hooks into their starting position.

The seat back can again be pushed forward and enables easy getting out and in of the passengers in the rear.